

FIGURE 1

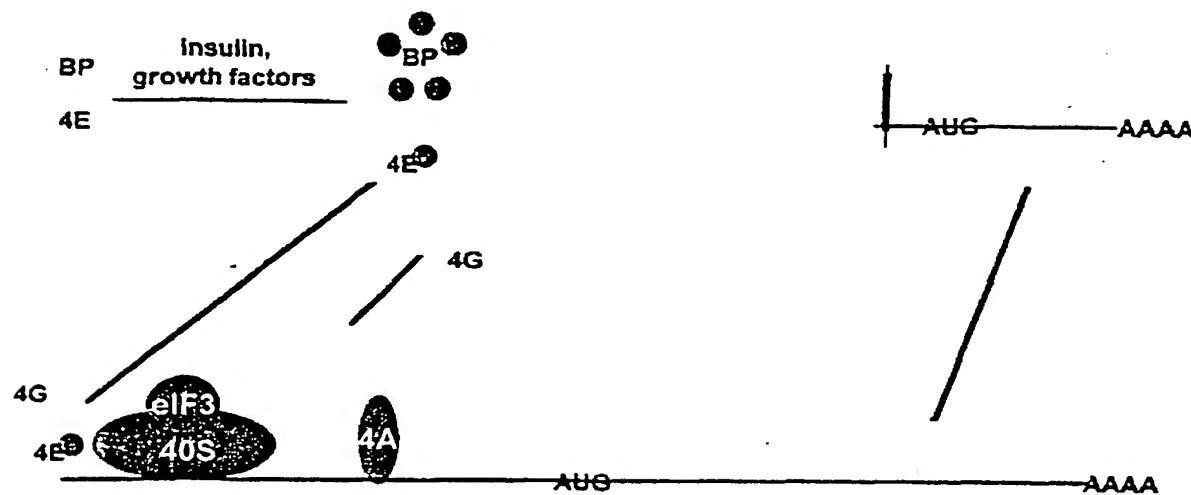
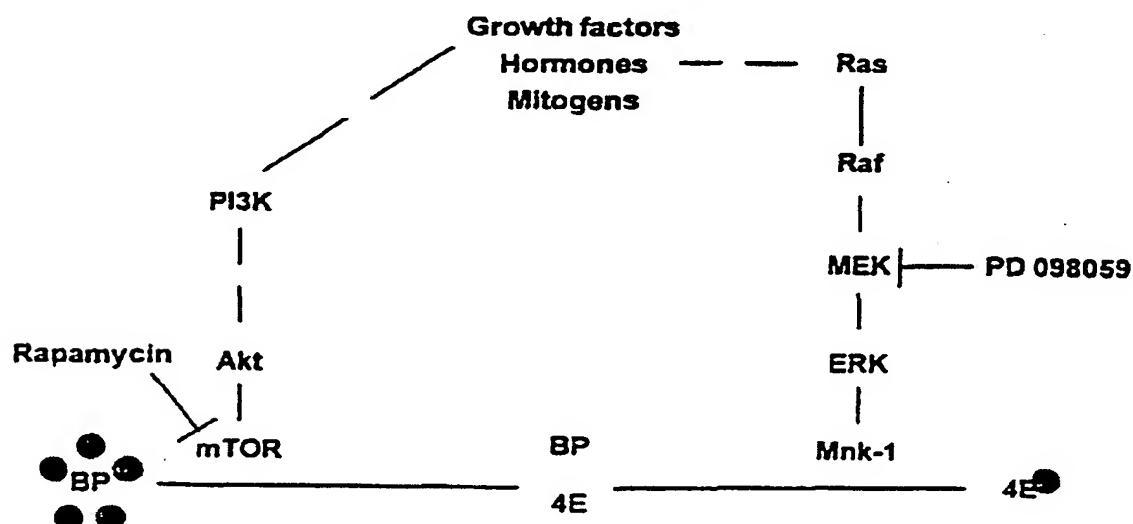


FIGURE 2



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FIGURE 3

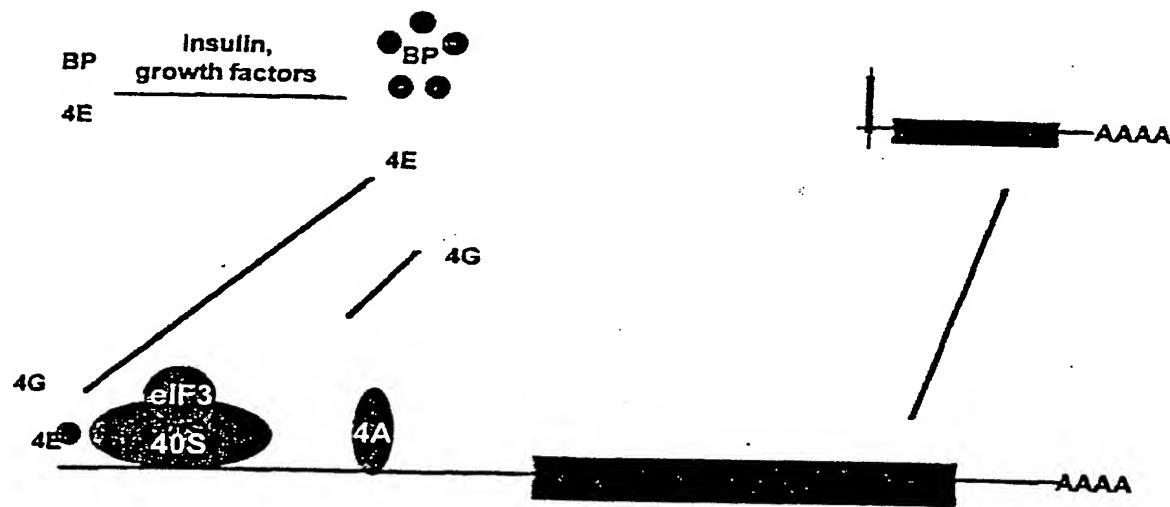
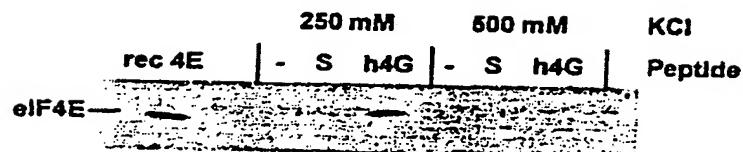


FIGURE 4



h4g human eIF4G    B β KKRYDREFLLGFAARQIKIWFQNRRMKWKK

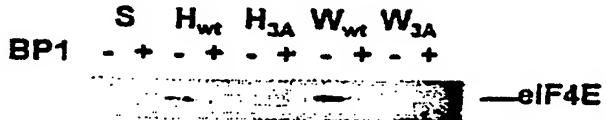
S scrambled eIF4G    B β FDLKFAALGRYRAEKRQIKIWFQNRRMKWKK

-    no peptide

rec 4E    recombinant human eIF4E

FIGURE 5

H	human eIF4G	B $\beta$ $\beta$ K K R <u>Y</u> D R E F <u>L L</u> G F 413-424
Y	yeast eIF4G	B $\beta$ $\beta$ K Y T <u>Y</u> G P T F <u>L L</u> Q F 449-460
W	wheat eIF4G	B $\beta$ $\beta$ R V R <u>Y</u> S R D Q <u>L L</u> D L 62-73
1	human 4E-BP1	B $\beta$ $\beta$ R I I <u>Y</u> D R K F <u>L L</u> M E U 51-62
2	human 4E-BP2	B $\beta$ $\beta$ R I I <u>Y</u> D R K F <u>L L</u> D R 51-62
S	scrambled eIF4G	

FIGURE 64G Peptide

H <sub>wt</sub>	hu 4G <sub>(413-424)</sub>
H <sub>3A</sub>	hu 4G <sub>(413-424)YALALA</sub>
W <sub>wt</sub>	wh 4G <sub>(62-73)</sub>
W <sub>3A</sub>	wh 4G <sub>(62-73)YALALA</sub>
S	scrambled hu 4G

Sequence

K K R <u>Y</u> D R E F <u>L L</u> G F A A
K K R A D R E F A A G F A A
R V R <u>Y</u> S R D Q <u>L L</u> D L A A
R V R A S R D Q A A D L A A
F D L K F A L G R Y R A E K

all peptides biotinylated and linked to Penetratin™

FIGURE 7

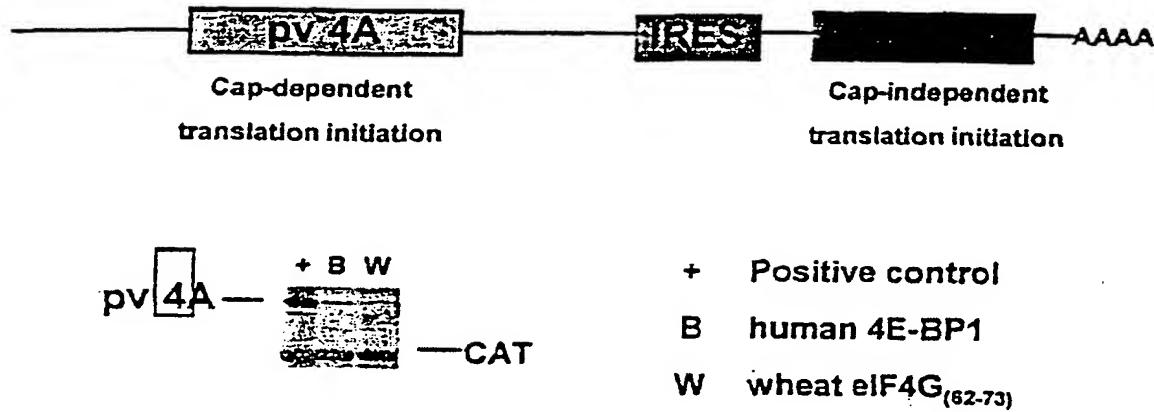


FIGURE 8

Peptide	Concentration			
	3 $\mu$ M	6 $\mu$ M	9 $\mu$ M	12 $\mu$ M
hu 4G <sub>(413-424)</sub>	+	++	+++	+++
hu 4G <sub>(413-424)Y416AL421AL422A</sub>	-	-	-	-
wh 4G <sub>(62-73)</sub>	-/+	+	++	+++
wh 4G <sub>(62-73)Y65AL70AL71A</sub>	-	-	-	-
scrambled hu 4G	-	-	-	-

MRC5 cells, 72 h serum-free growth, all peptides biotinylated and linked to Penetratin™

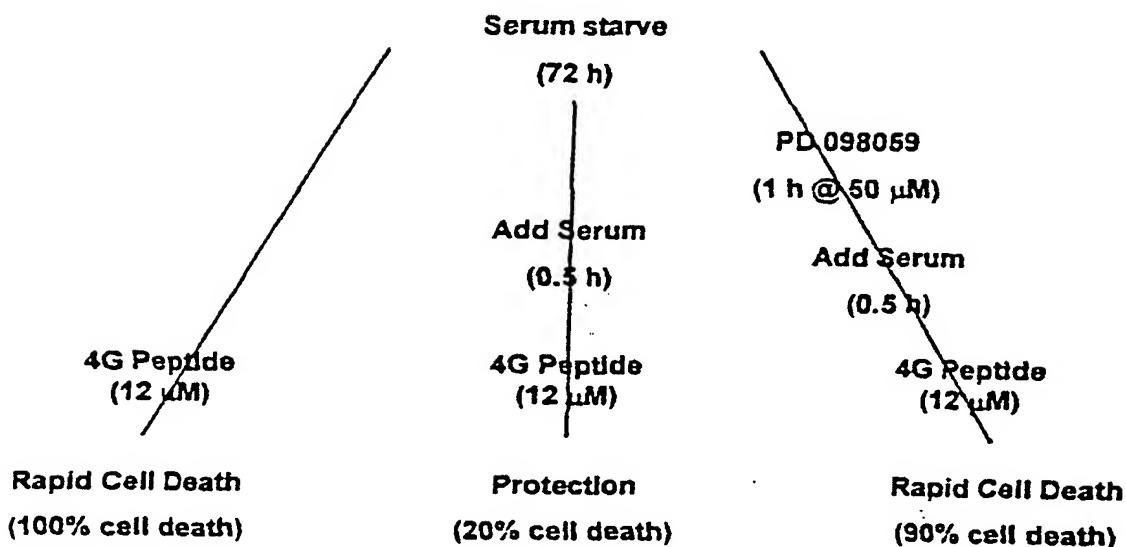
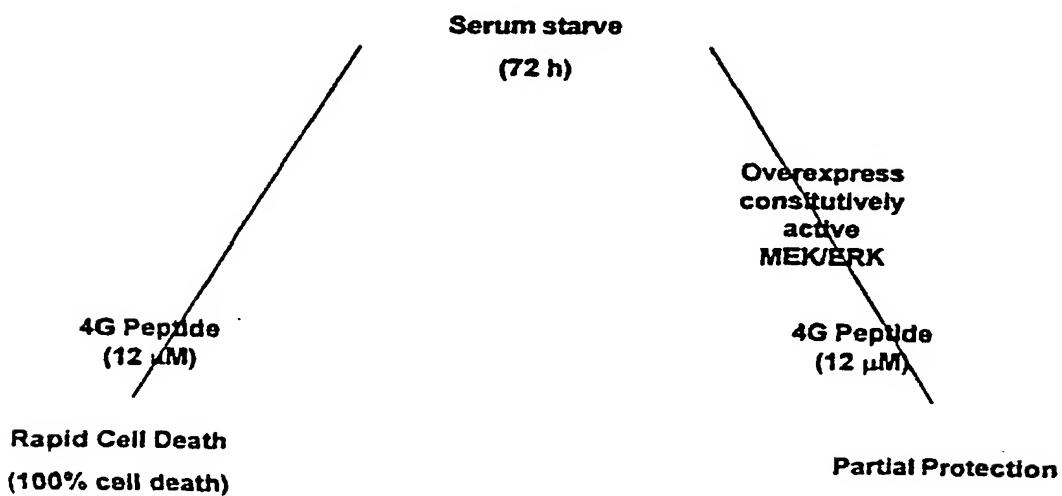
FIGURE 9FIGURE 10

FIGURE 11

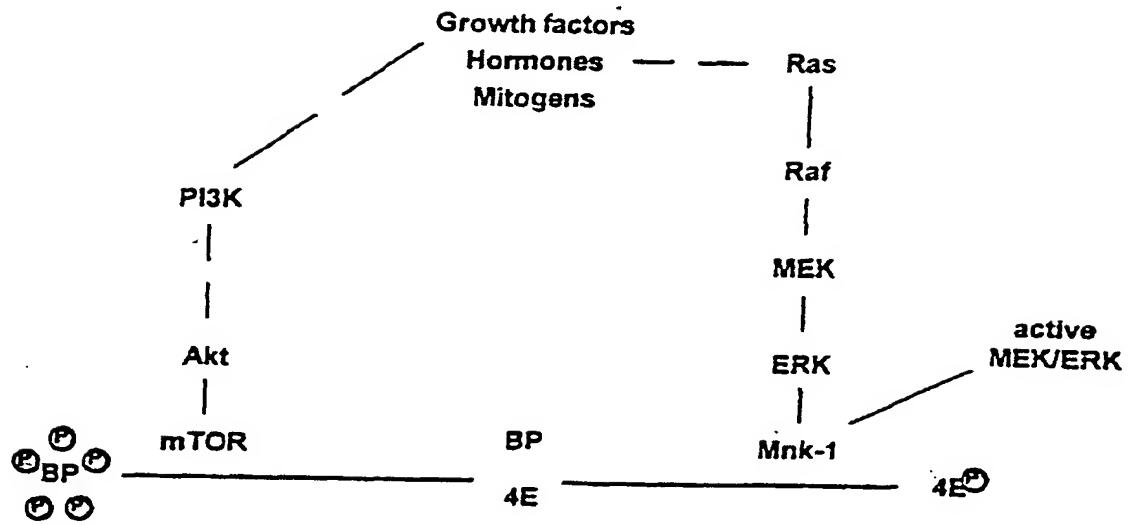


FIGURE 12

(a)

Hu 4G	Human eIF4G Peptide (569-580) Wild Type	KKRYDREF <u>PLL</u> GF
Hu 4G YLL-AAA	Human eIF4G Peptide (569-580) Y572A L577A L578A	KKR <u>ADREF</u> AA <u>GF</u>
Hu 4G Y-A	Human eIF4G Peptide (569-580) Y572A	KKR <u>ADREF</u> LL <u>GF</u>
Hu 4G L-A	Human eIF4G Peptide (569-580) L577A	KKR <u>YDREF</u> AL <u>GF</u>
W4G	Wheat eIF4G Peptide (62-73) Wild Type	RVRYSRD <u>QLL</u> DL
W4G YLL-AAA	Wheat eIF4G Peptide (62-73) Y65A, L70A, L71A	RVR <u>ASRDQAA</u> DL
BP2	Human 4E-BP2 Peptide (51-62) Wild Type	RIIYDRK <u>FLL</u> DR
BP2 YLL-AAA	Human 4E-BP2 Peptide (51-62) Y54A, L59A, L60A.	RII <u>ADRKF</u> AA <u>DR</u>
BP1	Human 4E-BP1 Peptide (51-62) Wild Type	RIIYDRK <u>F</u> LM <u>EU</u>
BP1 YLM-AAA	Human 4E-BP1 Peptide (51-62) Y54A, L59A, M60A	RII <u>ADRKF</u> AA <u>EU</u>

(b)

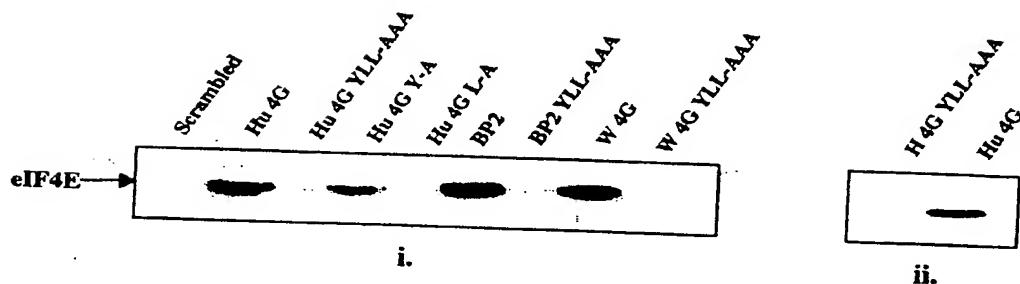
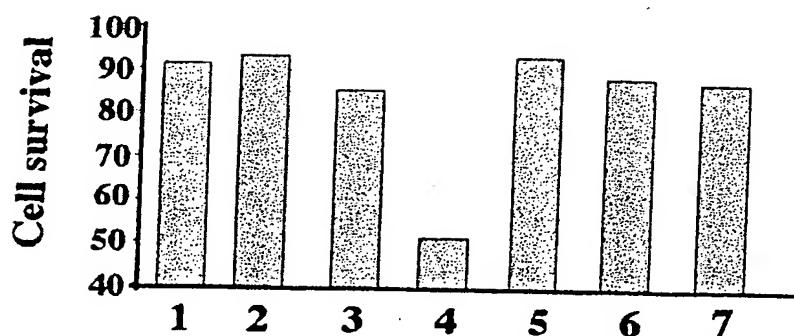
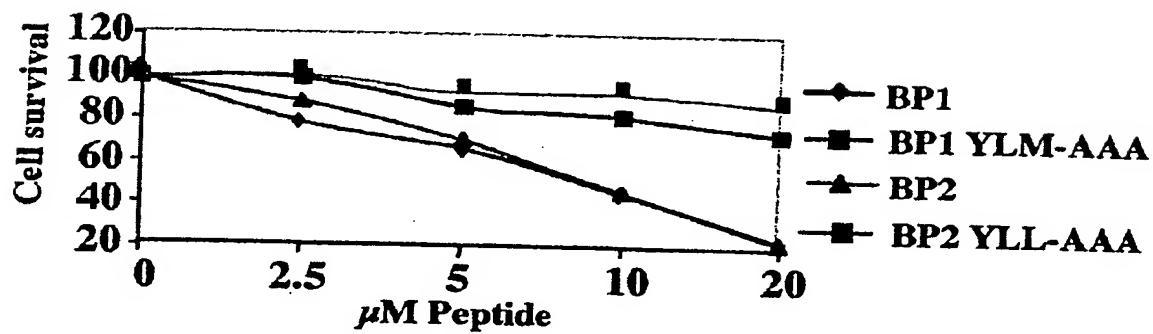


FIGURE 13

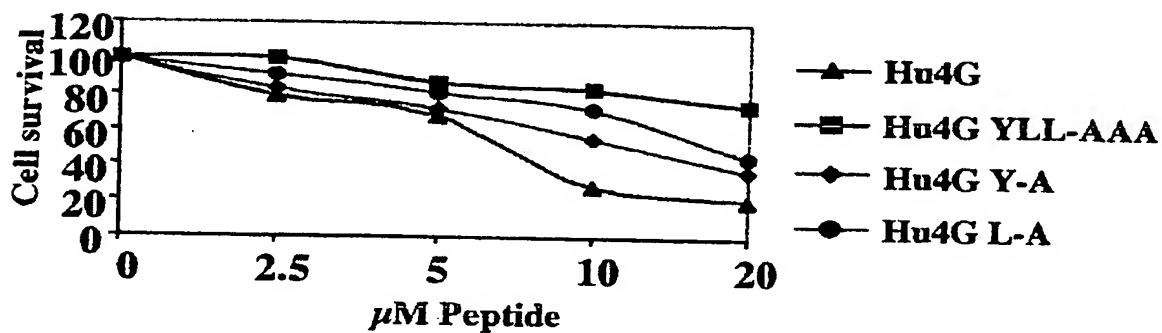
(a)



(b)



(c)



(d)

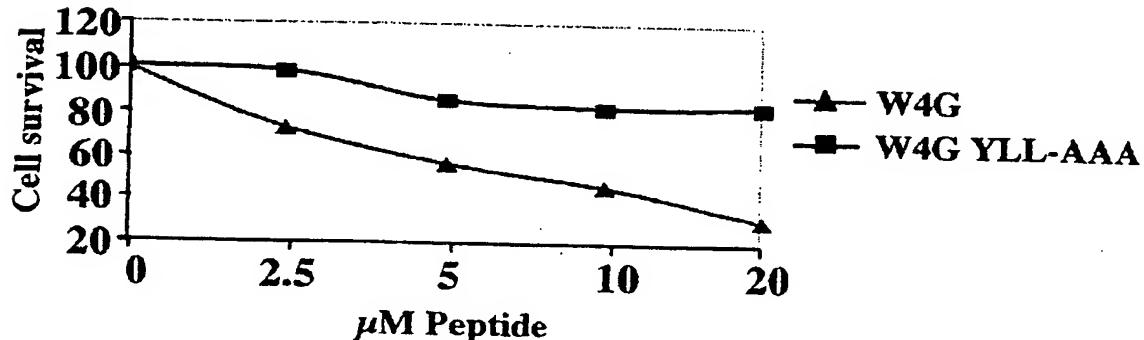


FIGURE 14

a.

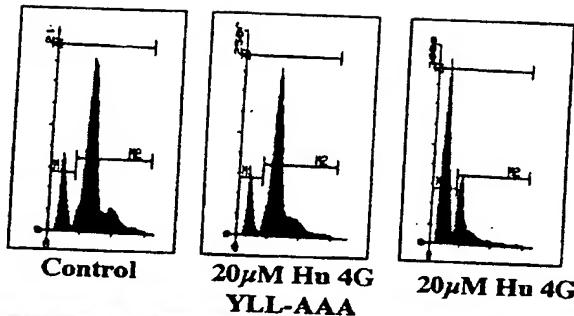


0min

30min

2h

b.

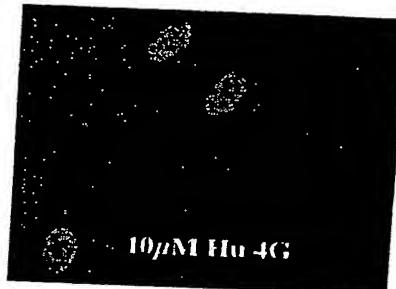


Control

20μM Hu 4G  
YLL-AAA

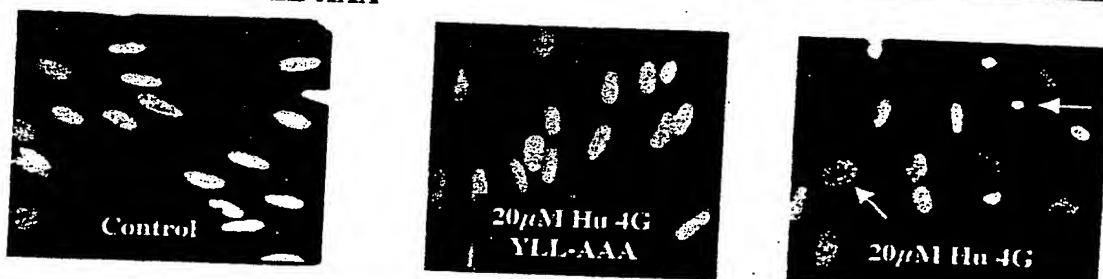
20μM Hu 4G

c.



10μM Hu 4G

d.

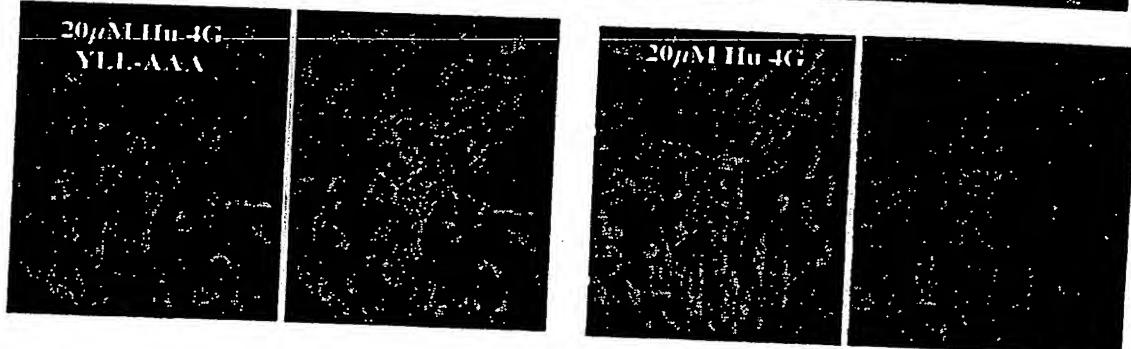


Control

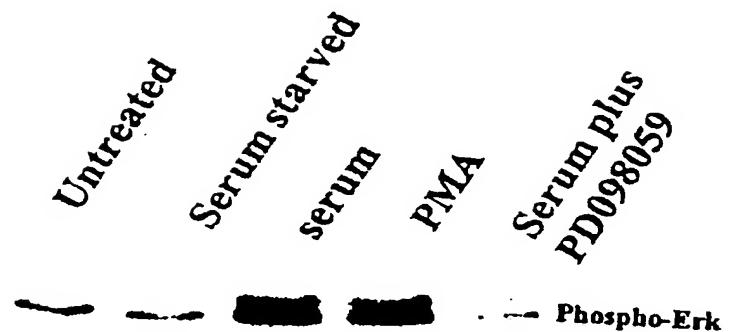
20μM Hu 4G  
YLL-AAA

20μM Hu 4G

e.



10/12

FIGURE 15

(a)

FIGURE 16

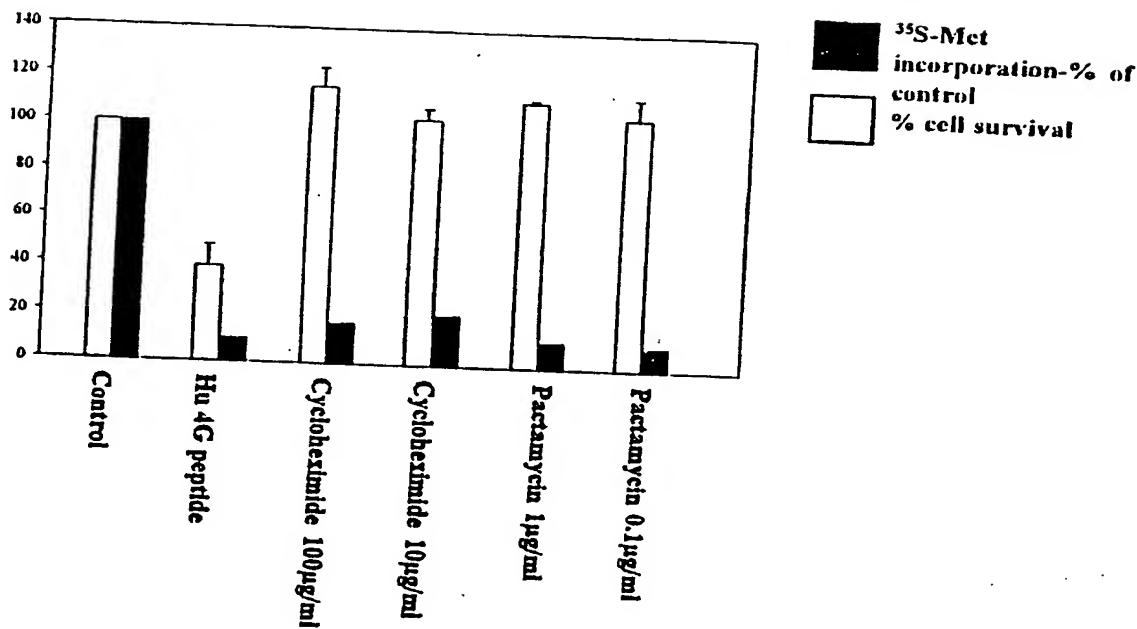
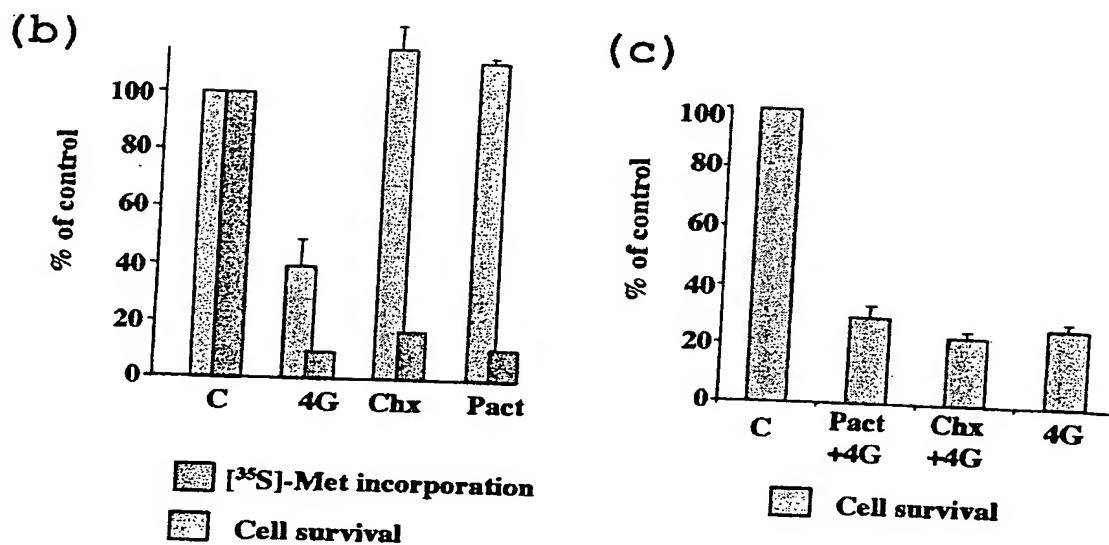


FIGURE 16 (cont.)



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